

Access of renewable & low-carbon gases to the existing gas infrastructure

Perspective of renewable gas producers

35th Meeting of the European Gas Regulatory Forum

Philipp Lukas | 29th April 2021

Renewable gases are essential for an integrated, resource-efficient energy system and for a cost-efficient transition





Storable and dispatchable renewable energy alongside wind and solar PV



Heat to buildings that have gas grid connections, including using hybrid heating solutions



High temperature heat and feedstock in energyintensive heavy industry



Energy-dense fuel for heavy and long-distance road transport and shipping



Feedstock for synthetic kerosene for aviation



Cross-sectoral advantages in terms of waste management, soil biodiversity, negative emissions

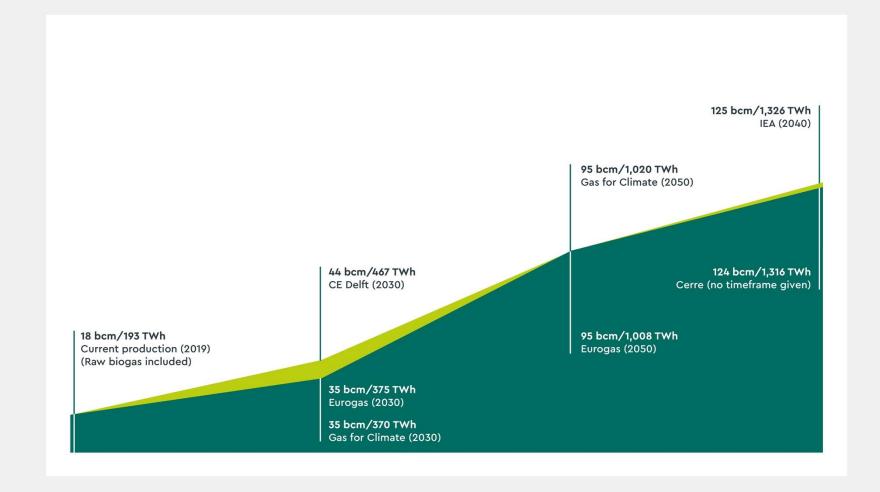


Future-proof jobs and foster rural economies

A smart combination of renewable gas and electricity, together with existing gas grids, will be the optimal way to decarbonise the EU energy system, with the system becoming fully renewable

Availability and scalability of biomethane have been widely recognised

Europe's biomethane potential for 2030, 2040 and 2050 as calculated by various studies, expressed in bcm and TWh





A European enabling framework is needed to unlock the potential of biomethane



Establish an EU target for renewable gas as a driver for development

Apply a sector-integration approach beyond the energy sector, thereby valuing positive externalities

Recognise LCA emissions savings and circular economy benefits

Facilitate the connection of biomethane production to the grid

Ensure technological neutrality in the demand side (heating and transport)

Create a European market for biomethane on the basis of GOs

The revisions of the gas package and of RED II

are closely tied in lifting up regulatory barriers and setting up new incentives

To deliver on the potential of renewable gases, the Green Deal is an opportunity to establish an EU regulatory framework that promotes the production, market uptake and system integration of renewable gases.



New proposed measure



Driving the demand up



Facilitating production and delivery



Ensuring a wellfunctioning market

Gas Directive and Regulation

RED II revised

EU-level GHG intensity reduction target as a complementary target including low-carbon gases EU-wide binding target of renewable gas in final gas consumption

Leveraging the existing grid through fair cost-sharing of network connection and reinforcement Common rules on sustainability:
total life-cycle emissionbased rules (included avoided
emissions). Full recognition
of the renewable character of
biomethane use in H&C

Extension of non-discriminatory rules to new gases

Acknowledging the off-grid gas infrastructure, e.g. LNG-terminals and road transport deliveries.

Definition of renewable gases

Enhanced GO system to enable cross-border trade and accounting towards EU objectives

How to make the most of the Gas Directive and Regulation

to deliver on the potential of biomethane & synthetic methane production?

Facilitating investment in production and injection with fair rules for all

A European « right to inject »

- 1. Right for project developers to be connected to the gas grids, even if they are located outside a gas-served zone
- 2. Coordinated planification by TSOs and DSOs with involvement of the regulator
- 3. NRAs shall validate grid reinforcements (reverse flows and local distribution network meshing) based on technical-economic criteria and the biomethane potential assessed with local authorities
- 4. NRAs shall define financing rules for:
 - Grid reinforcement, based on a technical-economic criterion
 - Grid connection, based on cost-sharing between producers and grid operators and amongst producers where relevant



Tapping into the market potential of areas where grid connection is not profitable

Integration of the distribution and supply of off-grid renewable gases in the Gas Directive



Enabling the utilization of a by-product of biomethane production in a circular economy

Preference of biogenic CO² over fossil CO²

Transparency principle applied to the European biogenic CO² market





GO-based System

for the EU market of renewable and low-carbon gases



What?

EU-wide system based on Guarantees of Origin (GO) recognized as a tool for tracing the origin of supplied and consumed renewable and low-carbon gases in the Internal Energy Market and the EU ETS.

How?

Use the current **GO** system linked with the sustainability certificate as a purchase record of gases in the EU ETS (see Figure 1 on the right).

Why?

Standardized and cost-effective decarbonization solution for gas consumers, e.g. EU ETS Operators.

The best price for the climate green value via a liquid EU-wide GO market decoupled from the physical market (just as for other carriers).

Workable and harmonized solution for the implementation of the revised EU ETS Monitoring and Reporting Regulation from 1 January 2022 – there is no time to wait for the set-up of specific databases for tracing gas transfers.

Figure 1. Example for the use of GOs in the EU ETS sectors Purchase record of biomethane Biomethane producer **EU ETS Operator** in Member State A in Member State B Gas supply

We would like to discuss with DG ENER and DG CLIMA a workable solution operational from 1st January 2022.









Thank you!

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